Richard Albores/DC/USEPA/US
05/24/2011 09:36 AM

To James Kenney, Jeanne Duross, Caroline Hermann, Andrew Stewart, Bernadette Rappold, Ben Larson

cc Patrick Foley, Teresa Dykes, Gregory Fried, Dan Drazan, Dave Kling, Anne Heard, Caroline Ahearn, Reiniero Rivera, Loan Nguyen, Lynne Davies, Suzi Ruhl, Arati Tripathi, Kent Benjamin, Marthea Rountree, Elaine Suriano, Robert Hargrove, Cliff Rader, Dan Chadwick, Mamie Miller, Marcia Mia, Robert Lischinsky, James Morgan, Mike Fisher, Stacey Noem, Catherine Lavender, Jeanne Briskin, Susan Burden, Ginny Phillips, Clarke Thurmon, Alan Morrissey, David Drelich, Loren Denton, Laurie Dubriel, Phyllis Feinmark, Frank Brock, Judith Hykel, Samantha Beers, Donna Mastro, Humane Zia, James VanOrden, Jefferie Garcia, John Ruggero, Neil Bigioni, Joan Armstrong, Karen Melvin, Kevin Smith, Mark Moloney, Kathy Memmos, Michelle Heger, John Blevins, Suzanne Murray, Scott McDonald, Tucker Henson, Jerry Saunders, Chris Lister, Cheryl Seager, Ben Harrison, Russell Murdock, Neal Gilbert, David Cozad, Mike Gaydosh, Kaye Mathews, David Hogle, Karen Kellen, Kimi Matsumoto, Thomas Sitz

bcc

Subject FYI - Bozeman Chronicle Article from 5/22/11

No Bozeman Daily Chronicle May 22, 2011 Sunday

May 22, 2011 Sunday

SECTION: ECONOMY; Pg. D.1

ACC-NO: 116114

LENGTH: 2041 words

HEADLINE: No

BYLINE: GWYNNE, S C; SOUDER, ELIZABETH; JACOBSON, GARY

BODY:

DIM0085176

In the past 18 months, complaints of thousands of property owners in Texas and other shale-gas states have given rise to a powerful anti
involve water and air pollution and whose principal target is the technique of hydraulic fracturing.

DALLAS -- Until last spring, the Knoll family of Bartonville, Texas, was living the sort of life that most people would have gladly swapped t
on a wooded two-acre lot in a neighborhood of million-dollar homes with swimming pools, perfect lawns and Lexuses in driveways.

Then something happened that the Knolls had never anticipated when they bought their immaculate corner of the American dream.

Starting in April 2010, the land immediately behind their house was transformed overnight into a heavy industrial site. A seemingly endle
neighborhood just north of Flower Mound, carrying tons of steel and piping.

As diesel fumes, chemical odors and dust wafted through the Knolls' backyard, a towering, 14-story gas-drilling rig went up. After the wel
was brought in to fracture or "frack" the well -- pumping several million gallons of highly pressurized, chemical-laden water into it to help

The Knolls, whose house was roughly 600 feet from the Gulftex-operated rig -- and a mere 800 feet away from a "smelly, noisy" compres
complained to state environmental officials of odors, contaminated water in their well, numbing headaches, nosebleeds, and even grassho
backyard.

Their experience was not unique, and not unfamiliar to many people who have been living in North Texas for the last decade.

The Knolls' house is situated squarely over the Barnett Shale, a massive rock formation more than a mile below the surface that has spaw
history of the oil and gas business. Since 2003, 15,675 gas wells have been drilled and fracked all across North Texas -- some 2,000 in Fo
drive down the price of natural gas from roughly $13 per million cubic feet in 2005 to a steady $4 today.

But the Barnett Shale boom was not, like all other Texas oil booms that went before it, simply about prodigious energy production. It was
this scale, between well-drilling and gas pipelines and dense urban and suburban settlement. Instead of such remote places as the Permia
Worth, Flower Mound, Grapevine, Arlington and other cities.

"One of the things that distinguishes Texas and the Barnett Shale is just how close drilling is to neighborhoods, schools, churches," says L
Environment Texas. "A lot of the drilling in other states is out in forests or public lands. Here, we are talking literally in peoples' backyards

And though thousands of Texans have made money from leasing their mineral rights to the drillers, there are more and more citizens like
under their land -- who are not happy about the new gas rush.

In the past 18 months, complaints of thousands of property owners in Texas and other shale-gas states have given rise to a powerful anti
involve water and air pollution and whose principal target is the technique of hydraulic fracturing.

That, in turn, has spawned a larger debate about the trade-off between an obvious benefit -- lots of cheap gas, which powers electric gen petrochemical industry -- and the comfort and welfare of Americans who live in proximity to its production.

That debate has landed, for the first time, in Dallas, which has so far allowed no drilling at all.

In 2007, the city began leasing public land for drilling. Dallas signed agreements with drillers worth some $33 million. For a while, it all se has earned Fort Worth $138 million since 2004.

Then the environmental climate changed, not just in Texas but in other shale gas states like Pennsylvania and New York. In response to l year suspended issuing drilling permits to companies such as XTO Energy and Trinity East. Though only a slice of the city -- its far wester there is still the potential for hundreds of wells to be drilled in proximity to neighborhoods.

This month Dallas began soliciting applications for a task force whose goal will be to rewrite the city's drilling ordinances.

By suspending gas drilling, Dallas has done what a growing list of other cities and states, mostly in the huge Marcellus Shale that underlie have done within the past 18 months.

In November, the state of New York placed an official moratorium on most gas drilling. Maryland has issued no new drilling permits since banned the practice, as have several smaller towns in Pennsylvania. In the Barnett Shale, the movement is finally starting to take hold, t -- and Southlake have suspended issuing drilling permits.

Why, after drilling so many shalegas wells, is everyone suddenly so spooked by gas drilling?

The simple answer is that in the last two years there have been a series of highly publicized spills and well contaminations around gas dri

These in turn have led to both academic and congressional studies of the practice of hydraulic fracturing that have received wide attentio Oscar-nominated documentary "Gasland," which purported to be an expose of fracking, showed residents of a Colorado shale-gas town lig the oil and gas industry strenuously denied any connection between fracking and such contaminations, "Gasland" became a rallying point

Fracking involves pumping millions of gallons of water, sand and chemicals (many of them hazardous to human health) under extremely h and 8,500 feet below the surface (in the Barnett), creating fissures in the shale to allow the gas to escape. Each well uses up to 2 million also employ the technique of horizontal drilling, by which operators can drill up to a mile away from the drill site.

Most of that chemical soup returns to the surface, where it is put in pits or stored in tanks until it can be hauled away. In Texas, fracking "injection" wells. Critics charge that these fluids can migrate under high pressure and pollute aquifers. The industry argues that because f general a mile or more below the water table -- there is no way that the chemicals can enter the water table, which lies a few hundred fe

Indeed, no fracking fluids have ever been detected in aquifers and wells, though a surface spill in April on a Chesapeake drilling site near
fracking water onto the ground, some of which reached a creek.

But the main public relations problems for the gas industry actually involve the gas itself, which flows strongly -- invisible and odorless --
removed, and the air pollution that accompanies the drilling process. Here, too, the industry has denied that there is any way for methan

The public relations problem, from the industry's point of view, is the growing list of cases of apparent contamination. Most involve water.
Dimock township, Pa., and in Parker County, Texas.

In Dimock, residents began to complain of polluted wells in 2008. On New Year's day 2009, a drinking water well exploded. Others told of
In 2009, the Pennsylvania Department of Environmental Protection found that the Cabot Oil and Gas company was responsible for polluti
drilling practices." (No fracking liquids were found in well water.) Under a settlement in 2010, Cabot agreed to pay homeowners $4.1 mill
well water. A lawsuit is still pending.

Dimock's experience became the driving force in New York state's decision to suspend drilling.

In 2010, Parker County, Texas, offered another apparent case of well-water contamination. In response to complaints from residents, the
Agency found that natural gas from drilling had **contaminated** a **drinking-water** aquifer, putting two homes at risk of explosion. This t
which the driller, Range Resources, had to take steps to protect water supplies.

As in many cases dealing with drilling, the science is imprecise at best and often the subject of controversy. In Parker County, the Texas
drilling in the state, sharply disagreed with the **EPA**, issuing a later finding that the source of the methane was not the Range wells.

"This is a case where from all of the information to date the **EPA** overstepped its authority and just stepped in and alleged that Range wa
Ireland, executive director of the Barnett Shale Energy Education Council, an industry group. "The Railroad Commission found that those
natural gas formations."

Nevertheless, a study by Duke University in May that examined 68 wells in Pennsylvania and New York, found methane levels 17 times hi
than in normal wells. Such conclusions, it should be noted, do not link the practice of fracking, which takes place at great depths, to well
explain exactly how the drilling might have caused the water pollution. They also do not take into account that methane also occurs natur

"If you look at the study, there was methane in most of the wells they tested," says Ireland, "even in wells that were not near Marcellus w
found a correlation between areas that had methane in them and methane in water wells. That is most likely true anywhere."

Then there is the question of air pollution, both in the form of "fugitive" methane from the well bore and emissions from diesel engines ar
process. A 2009 study by Southern Methodist University professor Al Armendariz, now the regional **EPA** administrator, found that natural
Dallas-Fort Worth than all of the cars and trucks in the area.

Another study, by Cornell University, showed high levels of gas escaping from the well-bore during the fracking process. While those num
industry, and by other academics, there is general consensus that a significant amount of natural gas does escape in the process. Yet and
benzene, a carcinogen over the long term, in 20 percent of 94 test sites of wells and compressor stations in North Texas. But only at two
deemed necessary.

The anti-drilling movement is beginning to have an effect on the natural gas industry, which has had to slow down and even cancel some
Mobil Corp., halted plans to drill in Southlake, and after paying millions of dollars to lease city land, now must wait for Dallas to rewrite dr
Corp.'s chief executive practically begged journalists at a recent convention to stop writing that fracking contaminates drinking water. And
Poole said if Pennsylvania ever halts drilling, Range would be out of business.

ILLUSTRATION

MCT Helmerich & Payne Incorporated drills for gas off Mansfield Webb Road in the city of Mansfield, Texas, close to homes, on May 13.

~~~~~

RICHARD L. ALBORES
Enforcement Attorney
Office of Enforcement and Compliance Assurance * U.S. EPA
1200 Pennsylvania Avenue, NW (Mail Stop 2248A) * Washington, DC 20460
email: albores.richard@epa.gov * phone: 202.564.7102 * cell: 202.445.1894

HELP ELIMINATE ENVIRONMENTAL VIOLATIONS - report tips and complaints at: http://www.epa.gov/tips


~~~~~